

**METRO VANCOUVER REGIONAL DISTRICT
LIQUID WASTE COMMITTEE**

REGULAR MEETING

June 8, 2022

1:00 p.m.

**Meeting conducted electronically and in-person pursuant to the Procedure Bylaw
28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia**

Webstream available at <http://www.metrovanancouver.org>

A G E N D A¹

1. ADOPTION OF THE AGENDA

1.1 June 8, 2022 Regular Meeting Agenda

That the Liquid Waste Committee adopt the agenda for its regular meeting scheduled for June 8, 2022 as circulated.

2. ADOPTION OF THE MINUTES

2.1 May 18, 2022 Regular Meeting Minutes

That the Liquid Waste Committee adopt the minutes of its regular meeting held May 18, 2022 as circulated.

pg 4

3. DELEGATIONS

4. INVITED PRESENTATIONS

5. REPORTS FROM COMMITTEE OR STAFF

5.1 Annacis Island Wastewater Treatment Plant Process

Verbal Update

Designated Speaker: Dan Coulman, Chargehand, Annacis Island Wastewater Treatment Plant

5.2 2021 GVS&DD Environmental Management and Quality Control Annual Report

That the Liquid Waste Committee receive for information the report dated May 12, 2022 titled "2021 GVS&DD Environmental Management & Quality Control Annual Report".

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¹ Note: Recommendation is shown under each item, where applicable.

5.3 Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022 – Fraser Sewerage Area – City of Maple Ridge pg 19

That the GVS&DD Board:

- a) give first, second and third reading to the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022*; and,
- b) pass, and finally adopt the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022*.

5.4 Out-of-Region Trucked Liquid Waste Discharge Request (Super Save) pg 28

That the GVS&DD Board authorize staff to issue an out-of-region discharge number based on the application from Super Save Toilet Rentals Inc. to discharge out-of-region trucked liquid waste from June 1, 2022 to September 30, 2022 pursuant to *GVS&DD Trucked Liquid Waste Bylaw No. 345, 2021*, as presented in the report dated May 31, 2022 titled “Out-of-Region Trucked Liquid Waste Discharge Request (Super Save)”.

5.5 Appointment of Deputy Sewage Control Manager and Enforcement Officer pg 32

That the GVS&DD Board:

- a) pursuant to the Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw and the Environmental Management Act:
 - i. rescind the appointment of former Metro Vancouver employee Grant McGillivray as a deputy sewage control manager and as an officer;
 - ii. appoint Metro Vancouver employee Maari Hirvi Mayne as a deputy sewage control manager; and
 - iii. appoint City of Vancouver employee Charla Brake as an officer.
- b) pursuant to Section 28 of the Offence Act for the purpose of serving summons for alleged violations under the Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw:
 - i. rescind the appointment of former Metro Vancouver employee Grant McGillivray; and
 - ii. appoint City of Vancouver employee Charla Brake.

5.6 Manager’s Report pg 35

That the Liquid Waste Committee receive for information the report dated May 20, 2022 titled “Manager’s Report”.

6. INFORMATION ITEMS

7. OTHER BUSINESS

8. BUSINESS ARISING FROM DELEGATIONS

9. RESOLUTION TO CLOSE MEETING

Note: The Committee must state by resolution the basis under section 90 of the Community Charter on which the meeting is being closed. If a member wishes to add an item, the basis must be included below.

10. ADJOURNMENT/CONCLUSION

That the Liquid Waste Committee adjourn/conclude its regular meeting of June 8, 2022.

Membership:

Stewart, Richard (C) - Coquitlam
Dominato, Lisa (VC) - Vancouver
Calendino, Pietro - Burnaby
Elford, Doug - City of Surrey

Ferguson, Steve - Langley Township
Little, Mike - North Vancouver District
Loo, Alexa - Richmond
McDonald, Bruce - Delta

McEwen, John - Anmore
Trentadue, Mary - New Westminster
Walker, Darryl - White Rock

**METRO VANCOUVER REGIONAL DISTRICT
LIQUID WASTE COMMITTEE**

Minutes of the Regular Meeting of the Metro Vancouver Regional District (MVRD) Liquid Waste Committee held at 1:01 p.m. on Wednesday, May 18, 2022 in the 28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia.

MEMBERS PRESENT:

Chair, Mayor Richard Stewart, Coquitlam
Councillor Pietro Calendino*, Burnaby
Councillor Doug Elford*, Surrey
Councillor Steve Ferguson, Langley Township
Mayor Mike Little*, North Vancouver District
Councillor Alexa Loo*, Richmond
Councillor Bruce McDonald*, Delta
Mayor John McEwen*, Anmore
Councillor Mary Trentadue*, New Westminster
Mayor Darryl Walker*, White Rock

MEMBERS ABSENT:

Vice Chair, Councillor Lisa Dominato, Vancouver

STAFF PRESENT:

Peter Navratil, General Manager, Liquid Waste Services
Jerry W. Dobrovolny, Chief Administrative Officer
Sabrina Mann, Legislative Services Coordinator, Board and Information Services

1. ADOPTION OF THE AGENDA

1.1 May 18, 2022 Regular Meeting Agenda

It was MOVED and SECONDED

That the Liquid Waste Committee adopt the agenda for its regular meeting scheduled for May 18, 2022 as circulated.

CARRIED

*denotes electronic meeting participation as authorized by Section 3.6.2 of the *Procedure Bylaw*

2. ADOPTION OF THE MINUTES

2.1 April 13, 2022 Regular Meeting Minutes

It was MOVED and SECONDED

That the Liquid Waste Committee adopt the minutes of its regular meeting held April 13, 2022 as circulated.

CARRIED

3. DELEGATIONS

No items presented.

4. INVITED PRESENTATIONS

No items presented.

5. REPORTS FROM COMMITTEE OR STAFF

5.1 Sewer Inspection New Technologies - Free Swimming Device

Peter Navratil, General Manager, Liquid Waste Services, provided members with a video presentation, showing an example of new sewer inspection technology.

The video presentation is not retained with the agenda.

5.2 State of the Assets Report - Liquid Waste

Report dated May 3, 2022, from Jennifer Crosby, Director of Project Management Office, Project Delivery and Rick Gallilee, Director, Support Services and Strategic Initiatives, Liquid Waste Services, to present the Liquid Waste Committee, with the *State of the Assets Report – Liquid Waste* as part of the ongoing implementation and continuous improvement of asset management practices for the utility, consistent with the approved *Asset Management Policy for Liquid Waste Services*.

Members were provided a presentation on the state of assets highlighting the asset inventory, the condition of assets, continuous improvement and next steps.

Discussion ensued regarding the type of assets considered in the financial report and the retirement obligation plan.

Presentation material titled “State of the Assets Report” is retained with the May 18, 2022 Liquid Waste Committee agenda.

It was MOVED and SECONDED

That the GVS&DD Board receive for information the report dated May 3, 2022, titled “State of the Assets Report - Liquid Waste”.

CARRIED

5.3 Environmental Risk Management Policy for Liquid Waste Services

Report dated April 29, 2022, from Andjela Knezevic-Stevanovic, Director, Environmental Management, and Quality Control, Liquid Waste Services, seeking the GVS&DD Board's approval of the *Environmental Risk Management Policy for Liquid Waste Services*.

Members were provided with a presentation on the environmental management system, evaluation of environmental risks and the need for environmental policy.

Presentation material titled "Environmental Risk Management Policy for Liquid Waste Services" is retained with the May 18, 2022 Liquid Waste Committee agenda.

It was MOVED and SECONDED

That the GVS&DD Board approve the *Environmental Risk Management Policy for Liquid Waste Services*, as presented in the report dated April 29, 2022, titled "Environmental Risk Management Policy for Liquid Waste Services".

CARRIED

5.4 Grant Funding Application for Northwest Langley Wastewater Treatment Plant Renewable Natural Gas Project

Report dated May 4, 2022, from Jeff Carmichael, Division Manager, Business Development, Liquid Waste Services, and Marie-Liesse Marc, Director, Major Projects, Project Delivery, seeking the GVS&DD Board endorsement of an application to the CleanBC Communities Fund, to partially fund the design and construction of the Northwest Langley Wastewater Treatment Plant Renewable Natural Gas project.

Members were provided a presentation on the grant funding application for Northwest Langley Wastewater Treatment Plant Renewable Gas Project, highlighting the project overview, proposed system, partnership with FortisBC and the business case.

Presentation Material titled "Grant Funding Application for NLWWTP Renewable Natural Gas Project" is retained with the May 18, 2022 Liquid Waste Committee agenda.

It was MOVED and SECONDED

That the GVS&DD Board:

- a) support the application for grant funding of \$13,400,000 for the Northwest Langley Wastewater Treatment Plant Renewable Natural Gas Project to CleanBC Communities Fund, as presented in the report titled "Grant Funding Application for Northwest Langley Wastewater Treatment Plant Renewable Natural Gas Project", dated May 4, 2022; and

- b) subject to successful grant funding, approve financing of eligible costs until the provincial government contributions are received, and approve funding for any ineligible and potential Project cost overruns.

CARRIED

5.5 Award of Contract Resulting from Request for Proposal No. 22-015: Supply and Delivery of Sodium Hypochlorite

Report dated April 28, 2022 from, Roy Moulder, Director, Procurement, Procurement and Real Estate Services, and Bryan Shoji, Director, Wastewater Treatment & Residuals Management, Liquid Waste Services, and Andrew de Boer, Acting Director, Operations & Maintenance, Water Services, advising the GVWD and GVS&DD Boards of the result of RFP No. 22-015: Supply and Delivery of Sodium Hypochlorite and to recommend award of a 3-year contract for an estimated value of \$11,992,000 (exclusive of taxes) to Brenntag Canada Inc.

It was MOVED and SECONDED

That the GVWD and GVS&DD Boards:

- a) approve award of a contract for an estimated value of \$11,992,000 (exclusive of taxes) to Brenntag Canada Inc., for an initial 3-year term, resulting from Request for Proposal No. 22-015: Supply and Delivery of Sodium Hypochlorite, subject to final review by the Commissioner; and
- b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.

CARRIED

5.6 Manager's Report

Report dated May 10, 2022, from Peter Navratil, General Manager, Liquid Waste Services, providing members with an update on the North Shore Wastewater Treatment Plant, the Metro Vancouver Laboratory assessment results, the Iona Island Wastewater Treatment Plant and Iona Beach Regional Park Tour, and the Liquid Waste Committee 2022 work plan.

Committee members were encouraged to attend the July 27, 2022 ribbon cutting for the opening and commission of the Iona Wastewater Treatment Plant.

Chair Stewart presented Andjela Knezevic-Stevanovic with a certificate of accreditation for a full scale commercial laboratory.

It was MOVED and SECONDED

That the Liquid Waste Committee receive for information the report dated May 10, 2022 titled "Manager's Report".

CARRIED

6. INFORMATION ITEMS

6.1 2022 Update on Liquid Waste Sustainability Innovation Fund Projects

7. OTHER BUSINESS

No items presented.

8. BUSINESS ARISING FROM DELEGATIONS

No items presented.

9. RESOLUTION TO CLOSE MEETING

No items presented.

10. ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED

That the Liquid Waste Committee conclude its regular meeting of May 18, 2022.

CARRIED

(Time: 1:50 p.m.)

Sabrina Mann,
Legislative Services Coordinator

Richard Stewart, Chair

52933067 FINAL

To: Liquid Waste Committee

From: Andjela Knezevic-Stevanovic, Director, Environmental Management & Quality Control, Liquid Waste Services

Date: May 12, 2022 Meeting Date: June 8, 2022

Subject: **2021 GVS&DD Environmental Management & Quality Control Annual Report**

RECOMMENDATION

That the Liquid Waste Committee receive for information the report dated May 12, 2022 titled “2021 GVS&DD Environmental Management & Quality Control Annual Report”.

EXECUTIVE SUMMARY

Annual reporting of GVS&DD Environmental Management & Quality Control is a regulatory requirement under the *Integrated Liquid Waste and Resource Management Plan*. This report summarizes the performance, process control and regional environmental quality information gathered through various monitoring programs and other environmental management initiatives. In 2021, Metro Vancouver wastewater treatment plants met performance expectations with respect to reduction of contaminant loadings to the receiving environment. Regional liquid waste discharges were effectively managed in a manner that is protective of human health and aquatic life.

PURPOSE

To provide the Liquid Waste Committee with a summary of the 2021 GVS&DD Environmental Management & Quality Control Annual Report.

BACKGROUND

Annual reporting of GVS&DD Environmental Management & Quality Control (EMQC) is a regulatory requirement under the *Integrated Liquid Waste and Resource Management Plan* (ILWRMP).

The Executive Summary of the 2021 GVS&DD EMQC Annual Report (Attachment) summarizes the regulatory and operational information gathered through the various monitoring programs and other environmental management initiatives that are in place to meet GVS&DD’s commitments under the ILWRMP, including those for: wastewater treatment plant influent, effluent and process streams; effluent toxicity and biosolids quality; operation of the collection system; and environmental health of regional water bodies. The 2021 GVS&DD EMQC Annual Report will be submitted to the Ministry of Environment and Climate Change Strategy. Additionally, it will be made available to the public through Metro Vancouver’s web site and through the Metro Vancouver Library.

SUMMARY OF RESULTS

In order to assess wastewater treatment system efficiency, performance and reliability, and to perform biosolids and environmental quality monitoring, the EMQC Division laboratories alone performed about 210,000 analyses in 2021. Major conclusions are as follows:

- a) The five wastewater treatment plants (WWTPs) treated about 451 billion litres of wastewater in 2021. The treatment process removed over 55,000 tonnes of biochemical oxygen demand (BOD₅) and over 57,000 tonnes of total suspended solids (TSS).
- b) All WWTPs operated in accordance with the Operational Certificate requirements. All WWTPs also met the National Performance Standards specified in the Wastewater Systems Effluent Regulations (WSER), with one exception. The Transitional Authorization issued to the Lions Gate WWTP under WSER in 2014, expired on December 30, 2020. Due to a delay constructing the North Shore WWTP, the Lions Gate WWTP in 2021 did not meet the WSER biochemical oxygen demand and suspended solids limits, but it met the limits for total residual chlorine and un-ionized ammonia.
- c) Almost 15,000 tests were performed on biosolids in 2021. Metal concentrations in weekly composite samples and fecal coliform counts in biosolids were generally well below the regulatory limits outlined in the Organic Matter Recycling Regulation.
- d) Effluent samples from all WWTPs passed the required monthly acute toxicity test except for two samples from Annacis Island, one each from Lulu Island and Iona Island and three samples from Lions Gate. The toxicity of one of the Annacis Island samples was attributable to ammonia. The cause of toxicity in the other Annacis Island and the Lulu Island effluent sample could not be determined. The Iona Island effluent sample required oxygen in excess of that specified by the Environment Canada testing method. The toxicant in the three Lions Gate samples was attributed to anionic surfactants.
- e) Water quality monitoring results in the vicinity of Iona Island WWTP Deep Sea Outfall indicated the applicable objectives or guidelines were met at the initial dilution zone (IDZ) boundary, except for dissolved oxygen and boron, for which results were consistent with typical concentrations in Canadian coastal marine waters. Methylmercury and PBDE (fire retardant constituent) concentrations in the effluent were elevated relative to guidelines but were consistent with previous monitoring studies indicating that water quality conditions are stable. Most of the sediment chemistry and bacteriology results were within their historical range with a few exemptions for bacteria and some organic substances which were elevated near the outfall.
- f) Assessment of Burrard Inlet environment monitoring results indicated that water quality objectives at the IDZ for the Lions Gate WWTP were met with the exception of dissolved oxygen, boron, and minimal number of measurements for turbidity, TSS and temperature which were not attributed to the discharge from Lions Gate WWTP. Sediment monitoring results were similar to prior years. The analysis of findings suggests that both nutrient and contaminant distributions in Burrard Inlet are confounded by activities and sources other than the Lions Gate WWTP.
- g) Concentrations of all parameters in the Fraser River met their corresponding applicable objectives or guidelines at the Annacis IDZ boundary and at ambient environment monitoring sites, with the exception of one anomalous dissolved aluminum result associated with the reference area.

- h) The bacteriological water quality for primary-contact recreation was met at bathing beaches from May through September, except for three beach locations. Swimming advisories were issued by the Health Authorities for English Bay, Wreck Beach and Deep Cove.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

Ongoing environmental management, monitoring and quality control works are proceeding as required under the GVS&DD *Integrated Liquid Waste and Resource Management Plan* and the associated costs are included in the Liquid Waste Services Environmental Management & Quality Control annual operating budget.

CONCLUSION

Annual reporting of GVS&DD Environmental Management & Quality Control is a regulatory requirement under the *Integrated Liquid Waste and Resource Management Plan*. This report summarizes the performance, process control and regional environmental quality information gathered through various monitoring programs and other environmental management initiatives that are in place to meet GVS&DD's commitments under the ILWRMP.

As illustrated by the 2021 GVS&DD Environmental Management & Quality Control Annual Report, Metro Vancouver's wastewater treatment plants continue to meet performance expectations with respect to reduction of contaminant loadings to the receiving environment and are consistently providing ongoing benefits to the region. Numerous monitoring programs continue to fulfill their role of confirming that the wastewater treatment plants are operating efficiently and with no adverse effects on human health or the environment. Findings of various environmental management initiatives confirm that regional liquid waste discharges continue to be effectively managed in a manner that is protective of aquatic life.

Attachment

2021 GVS&DD EM&QC Annual Report Executive Summary (52771609)

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EXECUTIVE SUMMARY

INTRODUCTION

Background and Purpose

The Greater Vancouver Sewerage and Drainage District (GVS&DD, or the District) operates five wastewater treatment plants (WWTPs) in the region. Three of the five plants provide secondary treatment (Annacis Island, Lulu Island and Northwest Langley) and discharge treated effluent into the lower Fraser River. The other two WWTPs (Iona Island and Lions Gate) provide primary treatment and discharge treated effluent to Strait of Georgia and First Narrows of Burrard Inlet, respectively.

The purpose of this report is to document the performance of the collection system and WWTPs in 2021 and to summarize the findings of numerous environmental management initiatives.

This report provides an overview of the information collected as a result of Environmental Management & Quality Control's environmental monitoring, modeling and assessment programs, including monitoring of the collection system, WWTP influent, effluent and biosolids quality, and environmental health of regional water bodies. Other programs and projects discussed in this report are in support of ongoing commitments under the Integrated Liquid Waste and Resource Management Plan (ILWRMP, or the Plan) or compliance with federal or provincial regulatory requirements.

Overview of the Liquid Waste Management Regulatory Framework and Monitoring Process

Under the provisions of the Environmental Management Act, the BC Minister of Environment and Climate Change Strategy approved Metro Vancouver's ILWRMP in May 2011. The Plan has three goals: protect public health and the environment; use liquid waste as a resource; and effective, affordable and collaborative management. Metro Vancouver manages its liquid waste in accordance with the ILWRMP and WWTP-specific Operational Certificates (OCs). These Certificates outline wastewater treatment and performance criteria and authorize the GVS&DD to discharge treated effluent from its WWTPs to the receiving waters. Treatment residuals are managed in accordance with Organic Matter Recycling Regulations.

The federal Wastewater Systems Effluent Regulations (WSER) under the Fisheries Act came into effect on July 18, 2012. The WSER contains provisions that authorize the deposit of treated wastewater into Canadian waters. GVS&DD is required to comply with WSER and monitor and report effluent quality on a quarterly basis.

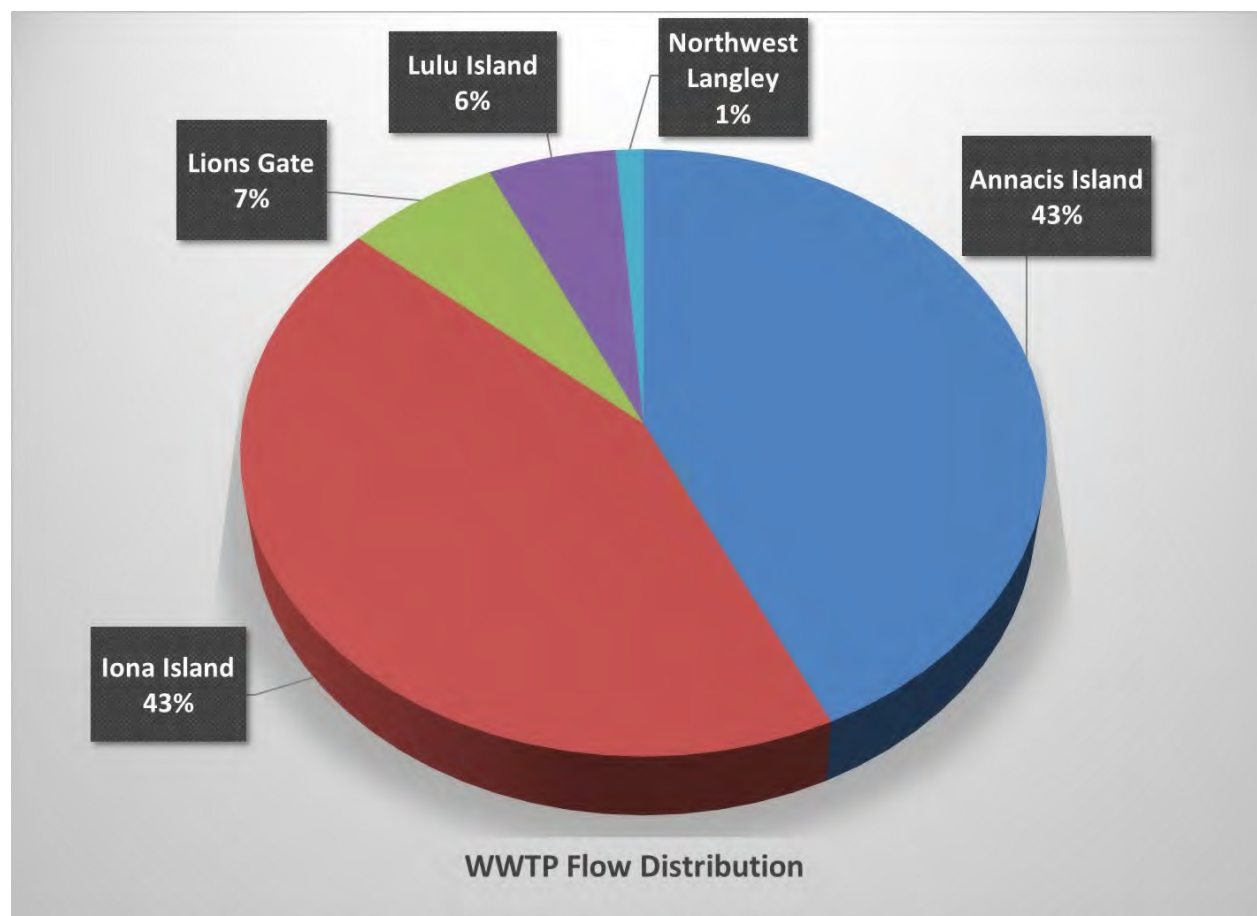
The District's objective is to maintain ongoing compliance with OCs, WSER and other applicable regulatory requirements, and by doing so continue to protect human health and the environment.

Most of the monitoring, laboratory analytical services and data analyses upon which WWTP performance is assessed were provided by the Environmental Management & Quality Control Division of Metro Vancouver Liquid Waste Services.

WASTEWATER TREATMENT PLANTS PERFORMANCE

In 2021, 451 billion litres of wastewater was treated at the GVS&DD's five WWTPs. Of this total, 224 billion litres received primary treatment at Iona Island and Lions Gate WWTPs, with the remaining 227 billion litres treated at the three secondary WWTPs at Annacis Island, Lulu Island and Northwest Langley, as shown in the graph below.

Distribution of Wastewater Treated in Metro Vancouver in 2021



Treatment Plant Performance Review

Metro Vancouver treatment plant performance is assessed annually to ensure:

- Plant operation is in accordance with design objectives and specifications; and
- All applicable regulatory requirements are met.

During 2021, the overall performance of the District's five WWTPs exceeded design performance expectations. Individual treated effluent flows for each WWTP and quantities of Biochemical Oxygen Demand (BOD₅) and total suspended solids (TSS) removed in 2021 are summarized in the table below.

Individual treated effluent flows for each WWTP and quantities of BOD₅ and TSS removed in 2021

Total for 2021	Annacis Island WWTP	Iona Island WWTP	Lions Gate WWTP	Lulu Island WWTP	Northwest Langley WWTP	Total
Effluent Flow, ML	196,180	194,045	30,204	25,526	5,777	451,732
BOD ₅ , Tonnes Removed	35,086	10,557	1,852	6,462	1,535	55,492
TSS, Tonnes Removed	31,657	15,106	3,961	5,356	1,360	57,439

Wastewater Treatment Plant Operational Certificates

The OCs issued by the Ministry of Environment and Climate Change Strategy (MOECCS) under the provisions of the Environmental Management Act include daily compliance levels for flow and daily loadings for BOD₅ (or Carbonaceous Biochemical Oxygen Demand (CBOD₅), where applicable) and Total Suspended Solids (TSS). The loading parameters listed as “maximum daily discharge loadings” are used to calculate the annual discharge authorization fees as required by the Permit Fees Regulation and are based on a calendar year.

Among other OC conditions, requirements are listed for disinfection of the effluent at all WWTPs except Iona Island, so that fecal coliform water quality objectives for the receiving water body are met at the edge of the Initial Dilution Zone (IDZ) as defined by the Municipal Wastewater Regulation. When chlorine is used for disinfection, it must be removed from the effluent before discharge to the receiving waters.

The OC requirements for BOD₅ and TSS were met throughout 2021. OCs require Metro Vancouver to report all treatment process interruptions to the MOECCS. In 2021, GVS&DD submitted reports for 16 environmental incidents and 1 missed sampling event to the regulators. Reported events can be generally grouped into 2 categories: Category 1 includes instances of disinfection or dechlorination system interruptions, plant bypasses and other unauthorized discharges. Category 2 events were the results of daily discharge loadings for TSS or CBOD₅ above the maximum load limits, as well as a daily rate of effluent discharge above the maximum limits. These events typically have no significant environmental impact.

Each event is carefully reviewed and a probable cause, mitigation measures and potential environmental effects are assessed based on dilution dispersion modeling of effluent plume transport and predicted downstream concentrations, or on field observations.

Integrated Liquid Waste and Resource Management Plan (ILWRMP)

The ILWRMP commits GVS&DD to operate the secondary WWTPs to meet the National Performance Standards for effluent specified by the Canada-wide Strategy for the Management of Municipal Wastewater Effluent (CWS-MMWE). These National Performance Standards for effluent quality are also included into the Wastewater Systems Effluent Regulation. The concentrations of CBOD₅ and TSS at all

secondary WWTPs stayed below the maximum average of ≤ 25 mg/L as specified by the National Performance Standards. Averaging periods for Annacis Island and Lulu Island WWTP are monthly, and for Northwest Langley WWTP, quarterly.

Wastewater Systems Effluent Regulations (WSER)

Quarterly monitoring reports were submitted through Environment and Climate Change Canada's (ECCC's) Effluent Regulatory Reporting Information System (ERRIS) in 2021. As required by WSER, the effluent monitoring data reported were: number of days that effluent was deposited; total volume of effluent deposited in m³; average effluent CBOD₅ in mg/L; and the average effluent concentration of suspended solids in mg/L. Reporting of effluent acute lethality for secondary treatment plants is required on a quarterly basis¹ for Annacis Island and Lulu Island WWTPs, and on an annual basis for the Northwest Langley WWTP.

In 2021, all District's secondary WWTPs met the applicable WSER requirements for all regulated parameters: TSS, CBOD₅, un-ionized ammonia and total residual chlorine. Non-acute lethality of effluent requirement was consistently met by the Northwest Langley WWTP but not throughout an entire year at the Annacis Island and Lulu Island WWTPs.

GVS&DD's primary treatment plants (Iona Island and Lions Gate WWTPs) were issued Transitional Authorizations (TA) under WSER on September 5, 2014. In 2021, the Iona Island WWTPs met the applicable WSER requirements for regulated parameters: TSS, CBOD₅ and un-ionized ammonia.

The Lions Gate TA expired on December 30, 2020. The monthly average limits of 115 mg/L CBOD₅ and 76 mg/L TSS specified in the TA for this WWTP were only applicable up to the end of 2020. Starting January 2021, the applicable monthly average limits defined in WSER are 25 mg/L CBOD₅ and 25 mg/L TSS. Due to a delay constructing the North Shore WWTP, the Lions Gate WWTP was not able to meet the CBOD₅ and TSS limits in 2021, although it met the limits for total residual chlorine and un-ionized ammonia. The requirement to report acute lethality results was met by the Lions Gate WWTP.

Effluent Toxicity Monitoring

In 2021, all effluent samples from all WWTPs passed the OC required Rainbow Trout acute lethality test using ECCC test protocols with the following exceptions: two Annacis Island WWTP samples; one Lulu Island WWTP sample, one Iona Island WWTP sample, and three Lions Gate WWTP samples. In the Annacis Island effluent samples, the toxicity in one sample was attributed to ammonia and in the other was undetermined. In the Lulu Island effluent sample, the toxicant was undetermined. The Iona Island effluent sample required oxygen in excess of that specified by the ECCC method. In all the three Lions Gate samples, toxicity was attributed to anionic surfactants.

In addition, acute toxicity testing of *Daphnia magna* was conducted monthly (or quarterly for Northwest Langley WWTP) as recommended by the CWS-MMWE. All samples from the secondary WWTPs passed the *Daphnia magna* acute toxicity test. For the primary WWTPs, all Iona Island and eleven Lions Gate

¹ Due to toxicity testing results, frequency was increased to monthly at Annacis Island WWTP in September and at Lulu Island WWTP in December.

WWTP samples passed the *Daphnia magna* test, and the toxicity in the remaining sample was attributed to anionic surfactants.

Some chronic toxicity was observed in effluent samples tested in 2021 for two freshwater and three marine test species; however, chronic toxicity was not predicted to occur at the initial dilution zone (IDZ) boundary except for the water flea, *Ceriodaphnia dubia*, in two of the five Lulu Island WWTP effluent samples tested in 2021. For all other WWTP effluent samples and test species chronic toxicity would not be predicted at the IDZ boundary.

Biosolids Monitoring Program

Process Requirements and Biosolids Management

The Organic Matter Recycling Regulation (OMRR) governs the management of biosolids and compost as soil amendments in the Province of British Columbia. Under this regulation, sampling frequencies and criteria values for fecal coliforms and metals as specified for Class A and Class B biosolids are based on several parameters including: type of treatment process (pathogen reduction requirements, vector attraction reduction); the amount of dry solids produced on a monthly basis; and the intended use of the biosolids. The GVS&DD's biosolids management program ensures that any biosolids not meeting class specifications are identified, tracked and managed appropriately.

Biosolids Quality

About 14,900 tests were performed on biosolids in 2021. Metal and fecal coliform counts in biosolids were generally well within the Class A criteria for Annacis Island WWTP, and within Class B criteria for Lions Gate and Lulu Island WWTPs. Iona Island WWTP land-dried biosolids met the Class B criteria. Thickened waste secondary sludge from Northwest Langley WWTP was trucked to Annacis Island WWTP for digestion.

ENVIRONMENTAL MANAGEMENT PROGRAMS

Environmental management programs form a major part of the Metro Vancouver's integrated approach to managing liquid waste. The purpose of these programs is to characterize environmental conditions of relevant water bodies in the region in order to understand the relative contribution and significance of discharges from the regional and municipal systems, determine if the applicable regulatory requirements are being met, and to warn of possible environmental issues. Environmental management programs include environmental monitoring, human health and ecological risk assessments, and environmental simulation and forecasting.

Overflow Quality Monitoring and Environmental Risk Assessments

Municipal wastewater in the region is conveyed and treated in the District's WWTPs. However, discharges of untreated wastewater into regional water bodies are sometimes unavoidable mostly due to insufficient system capacity during wet weather, power outages, and the legacy of combined sewer systems.

Combined Sewer Overflows

In 2021, the Combined Sewer Overflow (CSO) Monitoring Program characterized the overflow water quality at six selected CSO locations: Angus Drive, English Bay, MacDonald, Manitoba, New

Westminster Tank and Westridge. In addition, receiving environment monitoring program reports were completed for English Bay, Borden, Heather and South Hill CSOs and field work was completed for the Willingdon and Westridge CSOs receiving environment monitoring programs.

Sanitary Sewer Overflows

Metro Vancouver continued monitoring the receiving environment water quality after each sanitary sewer overflow and provided results to regulatory agencies and municipalities.

Environmental Monitoring in the Regional Waterbodies

Metro Vancouver monitors environmental health of the regional water bodies:

- near WWTP outfalls in the receiving environment, at the IDZ boundary, and
- in major water bodies within the ambient environment further away from WWTPs and other point source discharges to assess background conditions.

In previous annual reports, Metro Vancouver reported separately on WWTP receiving environment monitoring (REM) and ambient environment monitoring (AEM) programs. Metro Vancouver has modified its programs to a more holistic water body approach and in 2021 continued with amalgamated receiving and ambient environment monitoring programs for Burrard Inlet water and sediment quality, and for Fraser River water quality. A summary of the monitoring program findings for the regional water bodies is provided below.

Strait of Georgia

The 2020 Iona Island WWTP Deep Sea Outfall monitoring program included sediment and initial dilution zone monitoring. The assessment of the 2020 monitoring results completed in 2021 indicate that the applicable objectives or guidelines were met at the IDZ boundary, except for dissolved oxygen and boron, for which results were consistent with typical concentrations in Canadian coastal marine waters. Methylmercury and PBDE concentrations in the effluent were elevated relative to guidelines but were consistent with previous monitoring studies indicating that water quality conditions are stable. Work continued on a multi-year collaboration with UBC to better understand the transport and deposition of substances of interest in the Strait of Georgia.

Burrard Inlet

Burrard Inlet Environment Monitoring program included both water and sediment quality monitoring. The assessment of 2020 monitoring results completed in 2021 indicated that site specific water quality objectives at the boundary of the IDZ for the Lions Gate WWTP were met with the exception of dissolved oxygen, boron, and minimal number of measurements for turbidity, TSS and temperature which were not attributed to the discharge from Lions Gate WWTP.

The lower dissolved oxygen concentrations may be related to natural conditions and long-term regional changes, while boron concentrations are consistent with those in Canadian coastal waters. Turbidity, TSS and temperature were determined to be related to background conditions.

The results of the 2020 Sediment Effects Survey were similar to prior years. The Lions Gate WWTP discharges appear to have contributed to conditions more favourable for infaunal recruitment, growth, and reproduction. However, there was no correlation between wastewater quality indicators and biota results, suggesting that both nutrient and contaminant distributions in Burrard Inlet are confounded by activities and sources other than the Lions Gate WWTP.

Fraser River

In 2021, the report was completed for the 2021 Fraser River water quality monitoring program. As Metro Vancouver is transitioning to a more holistic integrated approach to its monitoring programs, what formerly were two separate monitoring programs, the Receiving Environment Monitoring Program (REM) for the Fraser River wastewater treatment plants (WWTP) (referred to as Annacis IDZ) and the Fraser River Ambient Monitoring Program (FRAMP), were operated in 2021 as a single program under the name of Fraser River Environmental Monitoring Program (FREMP). A new ambient monitoring site, upstream of the Metro Vancouver – Fraser Valley Regional District boundary, was added in the 2021 FREMP to characterize background water quality entering Metro Vancouver.

In 2021, the concentrations of all parameters met their corresponding applicable WQOs or guidelines at the Annacis Island WWTP IDZ boundary and Fraser River ambient environment monitoring sites, with the exception of dissolved aluminum in one of fifteen Annacis IDZ reference area samples.

Recreational Water Quality Monitoring Program

Metro Vancouver monitored the bacteriological quality of recreational waters in the region at 114 sampling sites from 41 locations. In 2021, the bacteriological water quality for primary-contact recreation was met for most bathing beaches from May through September. Swimming advisories were issued by the Health Authorities as a result of observed *E. coli* concentrations exceeding the single sample maximum water quality guideline at English Bay (4 days) and the exceedance of the 30-day geometric mean guideline at Wreck Beach Trail 7 – Oasis (10 days) and Deep Cove (12 days).

To: Liquid Waste Committee

From: Mark Wellman, Senior Engineer, Policy, Planning and Analysis, Liquid Waste Services

Date: May 30, 2022 Meeting Date: June 8, 2022

Subject: ***Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022 – Fraser Sewerage Area – City of Maple Ridge***

RECOMMENDATION

That the GVS&DD Board:

- a) give first, second and third reading to the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022*; and,
 - b) pass, and finally adopt the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022*.
-

EXECUTIVE SUMMARY

Metro Vancouver provides sewerage services to its member jurisdictions and properties requesting regional sewerage services must be located in one of the GVS&DD's designated sewerage areas. Metro Vancouver received a Council resolution from the City of Maple Ridge requesting the Fraser Sewerage Area be amended to include the property located at 13179 224 Street in the City of Maple Ridge to facilitate a new sewer connection to the property. The property is currently serviced by an on-site treatment system which the City of Maple Ridge indicates cannot be upgraded due to space limitations. At its May 27, 2022 meeting, the Metro Vancouver Regional District Board resolved that the extension of GVS&DD sewerage services to an existing restaurant and three additional existing businesses at 13179 224 Street in the City of Maple Ridge is consistent with the provisions of *Metro 2040*. A Liquid Waste Services technical review indicated no material financial impact on the Fraser Sewerage Area and negligible additional impact to the regional sewerage system.

Staff recommend that the GVS&DD Board approve the City of Maple Ridge's request for an amendment of the FSA boundary to include this property.

PURPOSE

To seek GVS&DD Board approval to amend the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Bylaw No. 310, 2018* to include the property located at 13179 224 Street, Maple Ridge within the Fraser Sewerage Area (FSA).

BACKGROUND

Sewerage area boundaries are fixed by the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Bylaw, No. 310, 2018*. Sewerage area boundaries are occasionally amended through an amending bylaw and in accordance with Sections 31 and 32 of the *GVS&DD Act*, typically at the request of a GVS&DD member. Metro Vancouver received a resolution from Maple Ridge Council requesting that the property located at 13179 224 Street be included in

the FSA to facilitate a sewer connection to the property. The property is currently home to a small restaurant, a dog grooming business, a convenience store, and an auto repair shop. The property owner has proposed an expansion of the restaurant to accommodate increased customers. The City of Maple Ridge supports the expansion, but indicates the current on-site septic system is not capable of managing the increased flows and that the property does not have sufficient space for a new on-site system. The new sewer connection would be sized to accommodate the expanded restaurant and the other existing businesses.

METRO 2040 CONSIDERATION

Following adoption of *Metro 2040* in 2011, Metro Vancouver procedures regarding the amendment of regional sewer services are subject to the provisions of *Metro 2040*. Accordingly, requests from member jurisdictions to amend a GVS&DD sewerage area must be checked against the provisions of *Metro 2040* and presented to the MVRD Board for consideration. After the MVRD Board resolves the application is consistent with *Metro 2040*, the decision to amend the sewerage area rests with the GVS&DD Board, subject to technical and financial considerations.

The property located at 13179 224 Street is a developed parcel designated Agricultural in *Metro 2040* and outside of both the FSA and the Urban Containment Boundary.

The following summarizes the MVRD Board considerations for this proposed boundary amendment:

- The Agricultural Land Commission confirmed the site is not subject to the *Agricultural Land Commission Act*;
- An existing on-site septic system is not feasible for the proposed restaurant expansion;
- The proposed use will not impact the surrounding agricultural uses nor impact urban containment objectives;
- Existing Maple Ridge sewerage infrastructure is located under 224 Street, across the frontage of the property; and
- The proposed connection will only be sized to accommodate the existing businesses on the site and the proposed restaurant expansion such that the required connection will have limited potential for prompting additional regional sewerage connection requests in the surrounding area.

At its May 27, 2022 meeting, the MVRD Board passed the following resolution:

That the MVRD Board:

- a) *resolve that the extension of GVS&DD sewerage services to an existing restaurant and three additional existing businesses at 13179 224 Street in the City of Maple Ridge is consistent with the provisions of Metro Vancouver 2040: Shaping our Future, and*
- b) *forward the requested Fraser Sewerage Area extension application to the GVS&DD Board for consideration.*

GVS&DD CONSIDERATION

The Liquid Waste Services technical review included an examination of financial, technical and operational and service level impacts on the regional sewer system. The review concluded there will be a negligible additional impact on the regional sewerage system due to this connection. All costs associated with connecting the property to the regional sewerage system will be borne by the property owner. Prior to connecting, the restaurant will be required to comply with the provisions in the *GVS&DD Food Sector Grease Interceptor Bylaw No. 268, 2012* (Reference 1) and the auto repair facility should refer to the “GVS&DD Guide to Managing Wastewater - Automotive Repair Industry” (Reference 2). Prior to connecting the property, the City of Maple Ridge will also need to submit an Application to Extend Sewerage and Drainage Systems (Reference 3) to the GVS&DD. Details of the proposed FSA amendment are shown on Drawing No. SA 2376 Sheet 116 (Attachment 1) and Drawing No. SA 2376 Sheet 115 (Attachment 2).

The *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022* (Attachment 3) is provided for GVS&DD Board consideration.

ALTERNATIVES

1. That the GVS&DD Board:
 - a) give first, second and third reading to the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022*; and,
 - b) pass, and finally adopt the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022*.
2. That the GVS&DD Board receive for information the report dated May 30, 2022, titled “*Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022 – Fraser Sewerage Area – City of Maple Ridge*”, and provide alternate direction to staff.

As the application is consistent with the provisions for sewer services under *Metro 2040*, and there are no regional technical or financial concerns, staff recommend Alternative 1.

FINANCIAL IMPLICATIONS

Connection costs from the subject property to the sewer system will be borne by the property owner.

CONCLUSION

Metro Vancouver received a Council resolution from the City of Maple Ridge requesting an amendment of the FSA to include the property located at 13179 224 Street in the City of Maple Ridge to facilitate a new sewer connection to the property. The MVRD Board resolved that the application was consistent with the provisions of *Metro 2040* and referred the application to the GVS&DD Board for consideration. A Liquid Waste Services staff review indicated no financial impact on the FSA and negligible impact on the regional sewerage system as a result of this connection.

As the application is consistent with the provisions for sewer services under *Metro 2040*, and there are no regional technical or financial concerns, staff recommend Alternative 1.

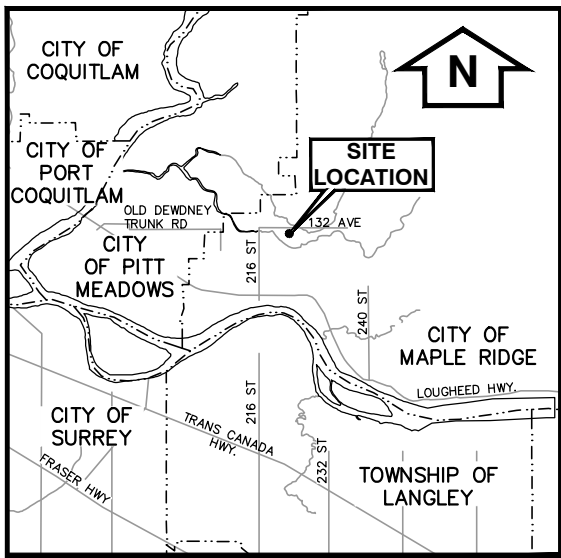
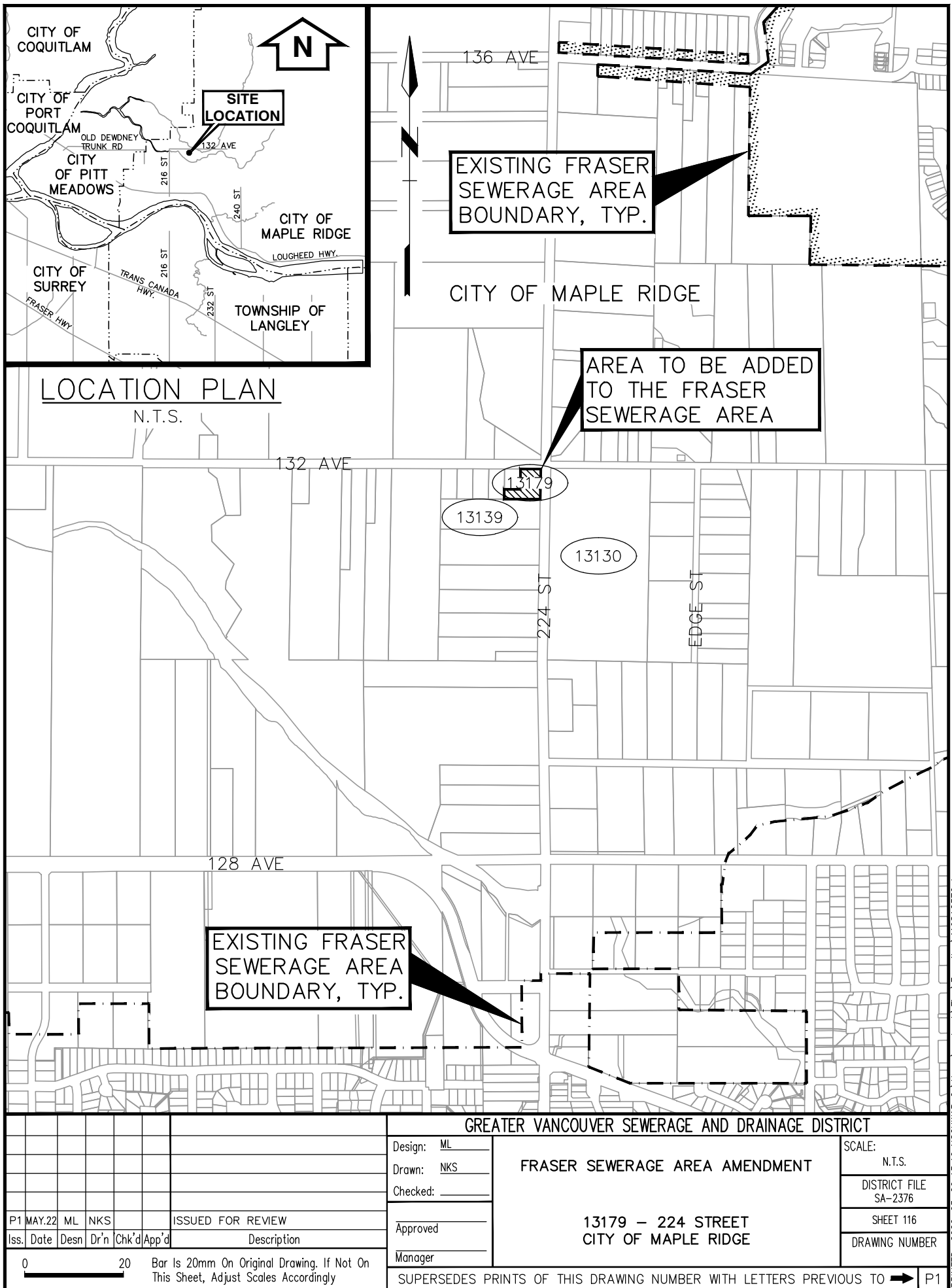
Attachments

1. Drawing No. SA 2376 Sheet 116: Fraser Sewerage Area Amendment 13179 224 Street, City of Maple Ridge
2. Drawing No. SA 2376 Sheet 115: Fraser Sewerage Area Amendment 13179 224 Street, City of Maple Ridge
3. *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022* (52346775)

References

1. [GVS&DD Food Sector Grease Interceptor Bylaw No. 268, 2012](#)
2. [GVS&DD Guide to Managing Wastewater - Automotive Repair Industry](#)
3. [Application to Extend Sewerage and Drainage Systems](#)

52350002



LOCATION PLAN
N.T.S.

				Design: <u>ML</u> Drawn: <u>NKS</u> Checked: _____ Approved _____ Manager _____				SCALE: N.T.S. DISTRICT FILE SA-2376 SHEET 116 DRAWING NUMBER	
P1	MAY.22	ML	NKS	ISSUED FOR REVIEW					
Iss.	Date	Desn	Dr'n	Chk'd	App'd	Description			
0 20 Bar Is 20mm On Original Drawing. If Not On This Sheet, Adjust Scales Accordingly				SUPERSEDES PRINTS OF THIS DRAWING NUMBER WITH LETTERS PREVIOUS TO ➡ P1					

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
BYLAW NO. 356, 2022**

**A Bylaw to amend the "Greater Vancouver Sewerage and Drainage District Sewerage and
Drainage Areas Boundaries Bylaw No. 310, 2018"**

WHEREAS:

- A. the Board of Directors of the Greater Vancouver Sewerage and Drainage (the GVS&DD) board (the "Board") adopted "Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Bylaw No. 310, 2018", to fix the boundaries of GVS&DD Sewerage and Drainage Areas;
- B. the Board of the Greater Vancouver Sewerage and Drainage District wishes to amend "Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Bylaw No. 310, 2018";

NOW THEREFORE the Board of the Greater Vancouver Sewerage and Drainage District enacts as follows:

Citation

- 1. The official citation of this bylaw is "Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022".

Amendment of Bylaw

- 2. The "Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 356, 2022 is hereby amended as follows:
 - a) by adding to the Fraser Sewerage Area, the following property:

	Address	Municipality	PID
1.	13179 224 Street	Maple Ridge	006-784-801

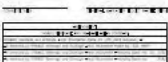
- b) by replacing Schedule "A" of Bylaw 310, 2018, as amended, with the attached Schedule A", forming part of this bylaw, containing Drawing Number S-3200 Sheet 1 titled "Greater Vancouver Sewerage and Drainage District Plan of Fraser Sewerage Area North Portion" dated May 6, 2022 to show the boundaries of the Fraser Sewerage Area, as amended.

Read a first, second and third time this _____ day of _____, _____.

Passed and finally adopted this _____ day of _____, _____.

Sav Dhaliwal, Chair

Chris Plagnol, Corporate Officer



To: Liquid Waste Committee

From: Dana Zheng, Program Manager, Policy, Planning and Analysis, Liquid Waste Services

Date: May 31, 2022 Meeting Date: June 8, 2022

Subject: **Out-of-Region Trucked Liquid Waste Discharge Request (Super Save)**

RECOMMENDATION

That the GVS&DD Board authorize staff to issue an out-of-region discharge number based on the application from Super Save Toilet Rentals Inc. to discharge out-of-region trucked liquid waste from June 1, 2022 to September 30, 2022 pursuant to *GVS&DD Trucked Liquid Waste Bylaw No. 345, 2021*, as presented in the report dated May 31, 2022 titled “Out-of-Region Trucked Liquid Waste Discharge Request (Super Save)”.

EXECUTIVE SUMMARY

Within *GVS&DD Trucked Liquid Waste Bylaw No. 345, 2021*, effective June 1, 2022 GVS&DD wastewater treatment plants will no longer accept trucked liquid waste generated outside the Metro Vancouver region, unless an out-of-region discharge number is authorized by the GVS&DD Board to assist neighbouring jurisdictions in exceptional circumstances. These discharges would still be subject to all Trucked Liquid Waste Bylaw provisions.

On May 16, 2022, Super Save Toilet Rentals Inc. applied for discharge of out-of-region waste from Trans Mountain Pipeline construction portable toilets. Staff recommend the Board authorize the issuance of an out-of-region discharge number to Super Save Toilet Rentals Inc. for a four-month duration, to allow Super Save time to secure alternate disposal means. Acceptance for the full requested duration is not recommended because this waste is normally readily accepted at other facilities. This application is due to temporary operational challenges at the District of Hope’s wastewater treatment plant, the past receiver of this waste.

PURPOSE

This report seeks GVS&DD Board consideration for the temporary discharge of out-of-region trucked liquid waste from Super Save Toilet Rentals Inc. at GVS&DD wastewater treatment plants.

BACKGROUND

In recent years, Metro Vancouver trucked liquid waste (TLW) facilities have seen an increase in out-of-region TLW, which create stress on wastewater treatment plant (WWTP) infrastructure and limit the ability to respond to demand fluctuations. The processing of TLW is becoming more challenging as wastewater treatment capacity is limited with aging infrastructure in a growing region. While current volumes of out-of-region TLW are less than 2% of the total TLW inflow, TLW discharges are of higher concentrations. The *GVS&DD Trucked Liquid Waste Bylaw No. 345, 2021* (TLW Bylaw) restricts discharges of TLW from outside the region effective June 1, 2022 to prioritize TLW generated in-region. The TLW Bylaw enables the Board to authorize out-of-region TLW on a case-by-case, time-limited basis through the issuance of out-of-region discharge numbers.

Pursuant to section 7A (5)(b) of the *Greater Vancouver Sewerage and Drainage District Act*, as part of its “Further objects”, the Board is granted the additional power “To establish the uses to which its waste disposal facilities may be put and by whom they may be used.” Below, staff have highlighted certain factors believed to be relevant to the Board’s consideration of this request for Metro Vancouver facilities’ receipt of out-of-region discharges. If authorized by the Board and following the issuance of out-of-region discharge numbers for this application, discharges will be subject to, and conditional on compliance with all TLW Bylaw provisions.

A written application from Super Save Toilet Rentals Inc. (Super Save) was received on May 16, 2022 and is summarized below and presented in the Attachment.

Super Save Out-of-Region TLW Request:

Requestor	Super Save Toilet Rentals Inc
Source	Trans Mountain Pipeline construction activities between Hope and the Coquihalla Summit
Type	Portable toilet waste
Quantity	25,000 gal/week (113.5 m ³ /week or approximately 6000 m ³ /year)
Requested Period	June 1, 2022 to September 30, 2023
Reason	The District of Hope WWTP is unable to accept this waste due to current technical challenges. Their staff have indicated their ability to resume acceptance after return to full operational capacity, in approximately two months.

Staff Comment on Super Save’s Request:

Metro Vancouver is currently receiving domestic TLW from Super Save and there have been no operational issues associated, though the waste received has been in smaller quantities than the requested volume. The requested volume is approximately 5% of annual domestic TLW received at Metro Vancouver TLW facilities; however it equals approximately 300% of the historical total volume of out-of-region TLW received annually.

Super Save had been discharging to the District of Hope WWTP, but were denied access given significant operational difficulties stemming from the November 2021 flooding events. District of Hope staff hope to resume acceptance of TLW discharges when their WWTP regains full operational capacity in two or three months’ time. Super Save has reached out to WWTPs in Chilliwack and Abbotsford, but they were not able to accommodate the request. Staff recommend that the Board authorize the issuance of an out-of-region discharge number on a temporary basis for four months, until Super Save can secure alternate disposal means.

ALTERNATIVES

1. That the GVS&DD Board authorize staff to issue an out-of-region discharge number based on the application from Super Save Toilet Rentals Inc. to discharge out-of-region trucked liquid waste from June 1, 2022 to September 30, 2022 pursuant to *GVS&DD Trucked Liquid Waste Bylaw No. 345, 2021*, as presented in the report dated May 31, 2022 titled “Out-of-Region Trucked Liquid Waste Discharge Request (Super Save)”.

2. That the GVS&DD Board reject Super Save Toilet Rentals Inc.'s May 16, 2022 application to discharge out-of-region trucked liquid waste from June 1, 2022 to September 30, 2022 pursuant to *GVS&DD Trucked Liquid Waste Bylaw No. 345, 2021*, as presented in the report dated May 31, 2022 titled "Out-of-Region Trucked Liquid Waste Discharge Request (Super Save)".

FINANCIAL IMPLICATIONS

There are no financial implications.

CONCLUSION

Effective June 1, 2022, GVS&DD WWTPs will no longer accept out-of-region TLW unless specifically authorized by the Board for a stipulated time period. Super Save's preferred discharge facility was impacted by the November 2021 flooding events and has suspended acceptance of TLW. Super Save requests that Metro Vancouver facilities accept their out-of-region TLW.

Staff recommend Alternative 1, that the Board authorize issuance of an out-of-region discharge number to Super Save for a temporary period of four months, to allow Super Save time to secure alternate disposal means. Following the issuance of out-of-region discharge numbers for this application, discharges will be subject to, and conditional on compliance with all TLW Bylaw provisions.

Attachment

Super Save Toilet Rentals Inc. TLW Out-of-Region Application Letter dated May 16, 2022

Reference

[*GVS&DD Trucked Liquid Waste Bylaw No. 345, 2021*](#)

52962669

Super Save Group

Disposal | Fence Rentals | Propane | Shredding | Toilet Rentals | Gas | Hydro Vac

May 16, 2022

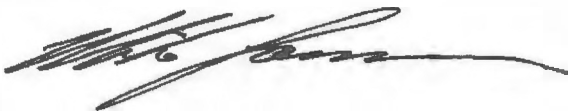
Doris Zheng,

We are currently servicing the portable toilets for the Trans Mountain pipeline expansion along the Coquihalla Highway near Hope and up to the summit, We were able to dispose of this waste at the Hope District waste water treatment plant (WWTP) for a short while, but were directed to stop as the WWTP could not handle the volume of waste we were dumping. Today I received notice from Hope that they are experiencing issues with their system and do not anticipate opening their septage station "In the near future". I am concerned that given the volume of waste we are handling, that treatment plant may not be a viable option. As you know, effective June 1, 2022, Metro Vancouver will be restricting waste from outside the Metro Vancouver region. Should the WWTP in Hope be unable to handle the volume of domestic septage we are removing from pipeline construction, this will leave us without a WWTP to dispose of this waste. I respect Metro Vancouver's position of restricting outside waste, however as there don't appear to be other options, I would like to ask for an exception in this case to be able to dispose of sewage waste from the Trans Mountain Pipeline Expansion construction at Metro Vancouver WWTP's until that project is completed, which at this point is estimated to be September 2023.

The type of waste involved is from portable toilets and portable toilet trailers. Volume of waste is approximately 25,000 gallons/week. We do not intend to service the Hope/Coquihalla area after this job is completed; it is outside of our regular toilet service area.

Please let me know if you need any more Information and thank you for your consideration.

Sincerely,



Mike Lannin
General Manager
Super Save Toilet Rentals Inc.

Contact | Head Office

, (604) 533-4423, Surrey, B.C. V3S 6K1
Bus: 604-533-4423 Toll Free: 1-800-665-2800

*The Blue Guys*TM

www.supersave.ca

To: Liquid Waste Committee

From: Kathy Preston, Director, Environmental Regulation and Enforcement, Parks and Environment

Date: May 3, 2022 Meeting Date: June 8, 2022

Subject: **Appointment of Deputy Sewage Control Manager and Enforcement Officer**

RECOMMENDATION

That the GVS&DD Board:

- a) pursuant to the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw* and the *Environmental Management Act*:
 - i. rescind the appointment of former Metro Vancouver employee Grant McGillivray as a deputy sewage control manager and as an officer;
 - ii. appoint Metro Vancouver employee Maari Hirvi Mayne as a deputy sewage control manager; and
 - iii. appoint City of Vancouver employee Charla Brake as an officer.
- b) pursuant to Section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*:
 - i. rescind the appointment of former Metro Vancouver employee Grant McGillivray; and
 - ii. appoint City of Vancouver employee Charla Brake.

EXECUTIVE SUMMARY

Recent changes in staff have resulted in a need to update staff appointments as GVS&DD Board-designated sewage control managers and officers under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*, the *Environmental Management Act* and the *Offence Act*. Staff recommend that the GVS&DD Board appoint staff and rescind appointments accordingly.

PURPOSE

To appoint and rescind appointments of Metro Vancouver and City of Vancouver employees as Board-designated deputy sewage control managers and officers.

BACKGROUND

Metro Vancouver's Liquid Waste Regulatory Program supports the goals of the *Integrated Liquid Waste and Resource Management Plan* through regulation of the discharge of non-domestic wastes to the region's sanitary sewer systems.

Employment status changes for Metro Vancouver and City of Vancouver environmental regulatory staff have resulted in a need to update staff appointments to ensure appropriate authority to advance liquid waste management goals. Section 29 of the *Environmental Management Act* and the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007* grants authority to Board-designated sewage control managers and officers.

ROLE OF THE DEPUTY SEWAGE CONTROL MANAGER

A deputy sewage control manager has the same powers as the sewage control manager under the *Environmental Management Act* and is a statutory decision maker in the administration of *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007*. The deputy sewage control manager's powers include the ability to issue permits, authorizations and orders under this bylaw.

ROLE OF MUNICIPAL SEWAGE CONTROL OFFICERS

Officers may enter property, inspect works, and obtain records and other information to promote compliance with the Greater Vancouver Sewerage and Drainage District Liquid Waste Management bylaws.

Metro Vancouver staff are responsible for the administration of the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw* within the boundaries of the GVS&DD. Within the City of Vancouver, City staff have historically administered the Bylaw. This arrangement has been in effect since the Bylaw was first enacted in 1990. A formal agreement between Metro Vancouver and the City of Vancouver was established to ensure that delivery of source control services by the City serves the interests of the GVS&DD and its taxpayers.

The *Offence Act* allows regional districts to appoint enforcement officers for the purpose of serving summons for bylaw violations. Officers, if appointed for that purpose, may serve a summons in respect of alleged offences under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007*.

ALTERNATIVES

1. That the GVS&DD Board:
 - a) pursuant to the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw* and the *Environmental Management Act*:
 - i. rescind the appointment of former Metro Vancouver employee Grant McGillivray as a deputy sewage control manager and as an officer;
 - ii. appoint Metro Vancouver employee Maari Hirvi Mayne as a deputy sewage control manager; and
 - iii. appoint City of Vancouver employee Charla Brake as an officer.
 - b) pursuant to Section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*:
 - i. rescind the appointment of former Metro Vancouver employee Grant McGillivray; and
 - ii. appoint City of Vancouver employee Charla Brake.
2. That the GVS&DD Board receive for information the report dated May 3, 2022 titled "Appointment of Deputy Sewage Control Manager and Enforcement Officer" and provide alternative direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications as the GVS&DD appointees are already on staff, and there are no expenditures for rescindments.

CONCLUSION

Recent changes in staff have resulted in a need to update staff appointments as a GVS&DD Board-designated deputy sewage control manager and officers under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*, the *Environmental Management Act*, and the *Offence Act*. Staff recommend Alternative 1.

52401014

To: Liquid Waste Committee

From: Peter Navratil, General Manager, Liquid Waste Services

Date: May 20, 2022

Meeting Date: June 8, 2022

Subject: **Manager's Report**

RECOMMENDATION

That the Liquid Waste Committee receive for information the report dated May 20, 2022 titled "Manager's Report".

1. North Shore Wastewater Treatment Plant Update

PCL Constructors Westcoast Inc., the new designated Prime Contractor for the project, is undertaking field assessments to identify any deficiencies with the existing structures on the treatment plant site. The transfer of technical project information to PCL is ongoing, and discussions between Metro Vancouver and PCL regarding novation of contracts for the plant's process equipment are also underway. Further, PCL has prepared a plan for their work to estimate the final construction budget, and is now developing plans to commence early construction work packages. Concurrently, AECOM is continuing to progress the plant's detailed design, and is completing design of elements supporting the early construction work packages. Staff anticipates that the early work on site will commence in summer 2022.

The project team held meetings over the past month with the District of North Vancouver regarding permitting and construction restoration and are working to implement new agreements to define the development arrangement between Metro Vancouver and the District of North Vancouver.

2. Communications Initiative to Reduce Surfactants in Wastewater

Metro Vancouver will be educating residents about how they can reduce the impacts of surfactants on our aquatic environment. Surfactants are found in soaps, laundry detergents, and personal care products and can be difficult to fully remove at wastewater treatment plants. Once in the environment, they can be harmful to fish and other aquatic life. This initiative will focus on letting residents know that they can use less and still get the same cleaning results because these products are designed for hard water and work exceptionally well in our region's soft water. Extra focus will be placed on laundry detergent, which makes up the largest volume of surfactants in wastewater.

This initiative first ran in 2021 and targeted only North Shore residents. This year's initiative, which will run from June to August, will again focus on North Shore residents due to the higher surfactant levels at the Lions Gate Wastewater Treatment Plant, but will also include some region-wide promotion. The paid digital media buy includes YouTube, Facebook, Instagram, and online banners. New videos for social media and a longer explainer video are being developed to support the

initiative. A postcard explaining how to reduce surfactants will also be mailed to all North Shore residences.

3. Liquid Waste Committee 2022 Work Plan

The updated 2022 Work Plan (Attachment) shows the status of the Committee's key priorities for the year.

Attachment

Liquid Waste Committee 2022 Work Plan

Liquid Waste Committee 2022 Work Plan

Report Date: June 8, 2022

Priorities	
1st Quarter	Status
2021 Microfibres “The Ocean Thanks You” Campaign Results	Complete
2021 Fats, Oil and Grease Campaign Results	Complete
Northwest Langley Wastewater Treatment Plant Project Update	Complete
North Shore Wastewater Treatment Plant Project Update	Complete
Development Cost Charge Review Process and Rate Amending Bylaw	Complete
Iona Island Wastewater Treatment Plant Projects - Project Definition Engagement Results	Complete
Iona Island Wastewater Treatment Plant Projects - Project Definition and Conceptual Design	Complete
GVS&DD Trucked Liquid Waste Bylaw Amendment	Complete
2022 Liquid Waste - Sustainability Innovation Fund Applications	Complete
Municipal Requests for Sewerage Area Boundary Amendments (as applicable)	Complete
Utility Policies (as applicable)	Complete
Contract Approvals – Contracts > \$5M (as applicable)	Complete
Project Delivery Capital Portfolio Update	Complete
Sewer and Effluent Heat Recovery Bylaw	Complete
Iona Island Land Tenure and License Agreements	Complete
Liquid Waste State of Assets Report	Complete
2 nd Quarter	
Liquid Waste Services Capital Program Expenditures Update as at Dec 31, 2021	Complete
Integrated Liquid Waste and Resource Management Plan: Report on Phase 1	Complete
LWS Environmental Management System Policy	Complete
2022 Update on Liquid Waste Sustainability Innovation Fund Projects	Complete
Northwest Langley Wastewater Treatment Plant Project Design Update	In Progress
Sewage Catchment Area (Rawn) Amendments	In Progress
2021 GVS&DD Environmental Management and Quality Control Annual Report	In Progress
Liquid Waste Services Environmental Risk Management Report	In Progress
Proposed Capital Investment and Carbon Accounting Processes For Sewer Heat Recovery Projects	In Progress
Liquid Waste Heat Recovery Policy	In Progress
Municipal Requests for Sewerage Area Boundary Amendments (as applicable)	In Progress
Utility Policies (as applicable)	In Progress
Contract Approvals – Contracts > \$5M (as applicable)	In Progress
3rd Quarter	
Liquid Waste Services Capital Program Expenditures Update as at April 30, 2022	In Progress
2022 Unflushables Campaign Results	In Progress
Sustainability Innovation Fund Project Update	In Progress
Municipal Requests for Sewerage Area Boundary Amendments (as applicable)	In Progress
Utility Policies (as applicable)	In Progress
Contract Approvals – Contracts > \$5M (as applicable)	In Progress

Food Sector Bylaw Review	Deferred to 2023
4th Quarter	Status
Liquid Waste Services Capital Program Expenditures Update as at August 31, 2022	Pending
Annual Budget & 5 Year Financial Plan - Liquid Waste	Pending
Annacis Outfall Construction Update	Pending
Drainage Areas Facility Policy	Pending
Estuary Management Program Update	Pending
Municipal Requests for Sewerage Area Boundary Amendments (as applicable)	Pending
Utility Policies (as applicable)	Pending
Contract Approvals – Contracts > \$5M (as applicable)	Pending